

Research Note 84-4

MAINTENANCE PERFORMANCE SYSTEM (ORGANIZATIONAL)
GUIDE FOR MAINTENANCE ACTION-TAKING
IN DIVISION 86 ARMOR UNITS

J. W. Stuster and Richard G. Fuller
Anacapa Sciences, Inc.

Michael Drillings and Melissa Berkowitz,
Contracting Officer's Representatives

Submitted by

Robert J. Seidel, Chief
TRAINING AND SIMULATION TECHNICAL AREA

and

Harold F. O'Neil, Jr., Director
TRAINING RESEARCH LABORATORY



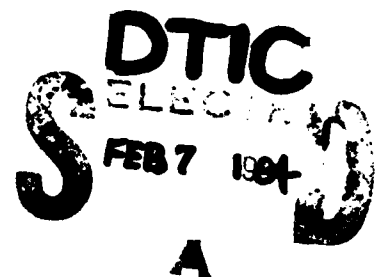
U. S. Army

Research Institute for the Behavioral and Social Sciences

January 1984

Approved for public release; distribution unlimited.

This report has been cleared for release to the Defense Technical Information Center (DTIC). It has been given no other primary distribution and will be available to requestors only through DTIC or other reference services such as the National Technical Information Service (NTIS). The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other official documentation.



84 02 6 107

AD A137570

DTIC FILE COPY

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER Research Note 84-4	2. GOVT ACCESSION NO. AD A137570	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Maintenance Performance System-Organizational Guide for Maintenance Action-Taking in Division 86 Armor Units		5. TYPE OF REPORT & PERIOD COVERED Contractor Report
		6. PERFORMING ORG. REPORT NUMBER TR465-39
7. AUTHOR(s) J.W. Stuster & Richard G. Fuller		8. CONTRACT OR GRANT NUMBER(s) MDA 903-81-C-0032
9. PERFORMING ORGANIZATION NAME AND ADDRESS Anacapa Sciences, Inc. Drawer Q Santa Barbara, CA 93102		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 2Q263743A794
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Research Institute for the Behavioral & Social Sciences 5001 Eisenhower Ave. Alexandria, VA 22333		12. REPORT DATE January 1984
		13. NUMBER OF PAGES 73
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES This project was monitored technically by Dr. Michael Drillings and Dr. Melissa Berkowitz		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Maintenance, Management Information System, Maintenance Training		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The purpose of this effort is to develop the Maintenance Performance System- Organizational (MPS-O) which is an integrated system for measuring maintenance performance, diagnosing performance problems, taking corrective actions, and providing training. This document focuses on the action-taking component of MPS-O. Parts I and II and Appendix A of this report constitute the field document to assist operations-level personnel in the conversion of MPS-O information into corrective action. Part I provides an overview of problem- solving techniques, Part II focuses upon the Action Meeting concept. Appendix A		

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

provides an overview of MPS-0. Appendix B provides a detailed outline for the implementation of the action-taking component of MPS-0; it is intended to serve as a guide for MPS-0 implementation teams.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)



TABLE OF CONTENTS

	Location/ Availability Codes	Page
INTRODUCTION.		1
Purpose of the Guide.		1
How to use the Guide.		1
PART I: OVERVIEW OF ACTION-TAKING.		3
The Basis of Decision-Making		4
Individual Prescriptive Action		6
Investigative Actions.		14
Consultation.		18
Staff Meetings.		22
Action Meetings		26
PART II: ACTION MEETINGS.		29
Introduction.		29
Why Action Meetings?.		29
The Part you Play in Holding Action Meetings.		30
Preparing for Action Meetings.		31
Review Progress on Previous Actions		32
Review MMIS-86 Reports.		32
Review Other Maintenance Performance Information.		37
Decide on Your Most Pressing Problem(s)		37
Prepare an Action Meeting Agenda.		37
Schedule Meeting and Notify Participants.		38
Assemble Materials.		38
Review Conduct of Last Meeting.		40
Conducting Action Meetings.		41
Provide Feedback and Recognition.		43
Present Problems and Objectives.		43
Identify Possible Causes of Problems.		44
Identify Possible Corrective Actions.		44
Select Specific Actions.		44
Determine Methods and Resources.		45
Assign Responsibility.		45
Record Key Points.		45
Summarize Results.		46
Meeting-Management Hints.		46
Action Meeting Follow-Up		49
Review Conduct of Meeting.		49
Monitor Progress on Completing Actions.		50
Identify Changes in Performance Data Over Time.		50
Use Results of Follow-up to Prepare for Next Meeting		50
APPENDIX A: THE MAINTENANCE PERFORMANCE SYSTEM (ORGANIZATIONAL)—OVERVIEW.		51

TABLE OF CONTENTS (Continued)

	Page
APPENDIX B: IMPLEMENTATION PLAN FOR MPS(0) ACTION-TAKING. . .	57
Exhibit A: Notes for Commanders' and Maintenance Managers' Briefings.	63
Exhibit B: Notes for Supervisors/Section Chiefs Training on Conduct of Action Meetings.	65
Section 1: Background.	65
Section 2: Holding the Meeting.	67
Section 3: Controlling the Meeting.	70
Section 4: Supervisor Exercise for Planning Action Meetings.	71
Exhibit C: Notes for Briefing Mechanic Participants in Action Meetings.	73

INTRODUCTION

PURPOSE OF THE GUIDE

Maintenance managers and supervisors are faced each day with problems associated with vehicles, personnel, and the organization of work. The purpose of this guide is to assist operations-level managers in solving some of these problems.

How the Guide is Organized

The Maintenance Performance System (Organizational) (MPS(O)) is designed to improve maintenance efficiency and training effectiveness. There are four components to the MPS(O); this document is concerned only with the Action-Taking component.

This guide to maintenance action-taking is composed of two parts. Part I describes in detail how information contained in MPS(O) reports can be translated into corrective action. Specific examples are provided to illustrate and clarify the concepts. All of the problem-solving methods described in Part I are based on established Army doctrine and practice. One of the methods that require special attention, however, is Action Meetings.

The concept of Action Meetings is introduced in Part I; Part II provides detailed guidance concerning the Action Meeting process. The objective of Part II of the Guide is to provide you--the operations-level maintenance manager--with a blueprint to help prepare and conduct Action Meetings. Appendix A provides a description of the total MPS(O) to show how action-meetings are integrated with the other system components.

HOW TO USE THE GUIDE

If you are an operations-level maintenance manager, e.g., Battalion Maintenance Officer (BMO), Battalion Maintenance Technician (BMT), or Battalion Motor Sergeant (BMS), you will be primarily interested in the overview of Action-Taking contained in Part I.

If you are a maintenance supervisor (NCOIC or section leader), you should read Parts I and II. Part II provides step-by-step guidance for conducting Action Meetings.

Appendix A provides **all** managers and supervisors with a summary description of the MPS(O) and its components. This description will allow you to better appreciate how you can best improve unit maintenance effectiveness.

PART I: OVERVIEW OF ACTION-TAKING

The actions discussed in this handbook are **corrective actions**. We are concerned here only with those actions, or management decisions, that are **aimed at improving some aspect of maintenance performance**. We are particularly concerned with corrective actions that are either initiated as a result of information contained in Maintenance Management Information System-DIV 86 (MMIS-86) reports, or decisions supported by MMIS-86 data.

There are many forms of corrective action available to maintenance managers and supervisors. We have categorized the primary forms of action-taking to clarify the ways by which MPS(O) information may be converted into corrective action. The types of action are:

- Individual prescriptive action
- Investigative action
- Consultation
- Staff meetings
- Action meetings

These types of action are discussed in detail below. Note, however, that not all of those involved in battalion maintenance have authority to take all types of actions. Figure 1 presents a matrix of maintenance personnel (managers, supervisors and mechanics) related to the various types of actions. Although all forms of action are not available to all personnel, each level has several alternatives from which to choose.

Choosing an appropriate action is similar to selecting the correct tool for a repair task. Just as a mechanic must select the proper tools for his job, so must managers and supervisors identify which actions will best accomplish their management objectives.

TABLE 1
MAINTENANCE ACTIONS RELATED TO INDIVIDUALS

TYPE OF ACTION	INDIVIDUALS							MECHS
	BN CMDR	BN XO	S3	BMO	BMT	BMS	SECT LDRS	
INDIVIDUAL PRESCRIPTIVE	•	•		•	•	•	•	
INVESTIGATIVE	•	•	•	•	•	•	•	
CONSULTATIVE	•	•	•	•	•	•	•	
STAFF MEETING		•		•	•			
MECH ACTION MEETINGS				•	•	•	•	•

THE BASIS OF DECISION-MAKING

Decision-making may be viewed as a step to finding solutions to problems. There are three basic elements common to successful decision-making: (1) information, (2) a problem-solving strategy, and (3) effective communications. These elements are discussed below.

Information. Access to information (data) is critical to successful decision-making. Remember there are many other sources of information relevant to your management objectives besides MMIS-86 reports. It is important that you use them all to help solve your maintenance problem.

Problem-solving strategy. As part of leadership training, Army managers are encouraged to exercise individual initiative and to avoid indecision. DAPAM 5-2 states: Every decision is a "moment of truth" for the manager. All responsibility for making decisions at his level rests with him. It is his burden and his alone. Decision-making is a lonely business--and the greater the responsibility, the more intense the loneliness. Making decisions is often hard and painstaking work--but it must be done. Indecision is inexcusable!

DAPAM 5-2 also provides a decision-making strategy in the form of five procedures and a warning to help make decisions. They are:

- Step 1: Collect pertinent facts within the time available.**
- Step 2: Develop as many courses of action as possible for consideration.**
- Step 3: Weigh each course of action against available facts (long-range and short-range effects).**
- Step 4: Select preferred course(s) of action.**
- Step 5: Communicate decision to those responsible for its implementation.**
- Warning: Avoid indecision. Never allow delegation to become abdication of authority.**

These steps can be applied when dealing with the day-to-day problems associated with battalion maintenance, also to unique, urgent or non-routine problems.

Communications. Another important part of successful decision-making and problem-solving is effective communication between individuals. Good communications build a bridge of understanding between sender and receiver. As a manager or supervisor you stand in the middle of that bridge, communicating in both directions--with your subordinates at one end and your superior(s) at the other. The ability to communicate effectively is a valuable management skill; it allows you to request additional information, to seek group solutions, and to convey decisions and the results of decisions to those responsible. DAPAM 5-2:2-5 lists these as the ingredients of good communication:

- **Stimulating others to want to hear and understand what you have to say.**
- **Expressing yourself clearly and concisely.**
- **Anticipating the impact of your communication on the personality of each individual (think before you speak).**
- **Being a good listener and receptive to communication from others.**

The following pages contain discussions of the primary types of corrective actions available to maintenance managers and supervisors at the battalion level. We will also review how the basic elements of effective decision-making--

information, a problem-solving strategy, and communication--contribute to the use of these actions to improve maintenance performance and training effectiveness.

INDIVIDUAL PRESCRIPTIVE ACTION

An **individual prescriptive action** is an action decided upon and initiated by a manager or supervisor. Individual prescriptive actions usually take the form of direct orders (e.g., "Wilson must attend OJT next month."). This form of action-taking reflects the traditional form of military decision-making. (But remember, our focus is on corrective actions, that is, actions designed to improve maintenance performance or training effectiveness.)

Some managers interpret the guidance provided by the Army's five-step decision-making procedure to mean that they must develop and implement solutions to problems **immediately**--sometimes on the spot. While this approach is occasionally necessary, it tends to ignore the full benefit of the procedure.

A manager who automatically or hastily responds to a problem with a directive, an individual prescriptive action, may have "short-circuited" the decision-making procedure by focusing on the **warning** (cited previously) to avoid indecision. Individual prescriptive action, initiative and decisiveness all play important roles in effective management. But, just as you would not (at least by choice) use a pair of pliers to remove the lug nuts holding a heavy wheel in place, you should not rely on individual prescriptive action exclusively just because it is the most convenient action available to you. Clearly, individual action has its place, but consider the alternatives carefully, as you would search your toolbox for the most appropriate wrench to use for a particular task.

Now we will review an example in which **deliberate** individual action is appropriate and emphasized. It means that careful consideration has been given to alternatives and potential consequences. Deliberate action results from following the five-step procedure summarized on page 4.

THIS PAGE INTENTIONALLY BLANK.

Example 1

Background. Assume you are a maintenance supervisor at battalion level in an armor tank battalion. Your responsibilities are those of a "senior foreman", coordinating and supervising the activities of the several maintenance sections. Each section leader looks to you for direction and technical advice. Your superior (the BMO) **expects you** to define daily priorities, schedule vehicles, allocate manpower and handle the complaints and emergencies of your personnel.

An additional and important function is to **"troubleshoot the maintenance system"**; that is, to determine the causes of persistent maintenance problems. Let us look at an example in which the MPS(O) can help you solve a typical problem.

Problem. You receive an MMIS-86 report (Table 5) which presents the maintenance histories of company vehicles maintained by your shops. While reviewing this table, you note the "Repeated Task Flags" (shown as "R's" in the right-hand column of the table). You notice that the voltage regulator on Vehicle A12 was replaced on 2134 and again on 2136 (Julian dates)--twice in three days. You wonder why. What should you do?

1-99 ARMOR

TABLE 5 (M60-A) CO : MAINTENANCE TASKS BY VEHICLE

FOUR-WEEK REPORTING PERIOD ENDING: 2155 (4 JUN 82)

VEHICLE BUMPER NUMBER	MAINTENANCE TASK	JULIAN DATE	REPEATED TASK FLAG
A11	PERFORM SYNC CHECK RAMP METHOD	2011	
	REPL M13A2/M13A1D BALLISTIC COMPUT	2026	R
	REPL M13A2/M13A1D BALLISTIC COMPUT	2067	R
	REPL RANGEFINDER &/OR END HOUSING	2079	
	REM DEFECTIVE/INOP POWERPACK	2128	
A12	REPL SUPERELEVATION ACTUAT	1344	
	PERFORM SYNC CHECK RAMP METHOD	2011	
	REPL VOLTAGE REGULATOR	2134	R
	REPL VOLTAGE REGULATOR	2136	R
A13	PERFORM SYNC CHECK RAMP METHOD	2011	
	REPL DRV SPROCKET	2095	
	REM/INSTL LOADER'S PERISCOPE M37	2098	
	REM POWERPACK TO DO OTHER TASKS	2140	
A14	PERFORM SYNC CHECK RAMP METHOD	2011	
	ADJ/TIGHTEN/REPL MINOR COMPONENTS	2145	
	REPL M13A2/M13A1D BALLISTIC COMPUT	2026	
	REPL SUPERELEVATION ACTUAT	2048	
	TROUBLESHOOT ELEC SYSTEM	2144	
	REPL MASTER OR SLAVE CYLINDER	2150	

Action. Remember, the first step in solving a problem is to gather additional pertinent information. For example, you need to know who worked on that tank. MMIS-86 Table 6 will tell you the hours worked by your mechanics and it will identify tasks performed on **specific** vehicles. Table 6 will also help you to further investigate the **causes** of problems like the repeated tasks flagged on Table 5.

For instance, the summary for Tank A12 informs you that two mechanics, Smith and Jones, performed the initial regulator replacement on 2134 (Julian date). It took them a total of 10.2 hours to perform the job. Brown and White required only 6.4 hours to do the same job two days later. Why is there a difference? You need to know more about Smith and Jones background, training, and experience.

You can find the answer on MMIS Table 10. This table provides an individual experience profile for each mechanic. Turning to Smith's experience profile, you look for task number 20, RPL VOLTAGE REGULATOR. You are not surprised to learn that he has performed that task only once and that was with Jones. Jones' Table 10 would indicate that he was equally inexperienced in the performance of that task.

Now that you have a fairly clear picture of the problem, your next step is to develop alternative courses of action to solve the problem. Then you weigh those alternatives against the available information to determine the preferred solution.

Solution. Well, you could berate the mechanics, or insist that they read and follow the procedures in the Manual, but neither of these solutions really addresses the fundamental cause--Smith and Jones are inexperienced. A more effective solution could be to direct their section leader to assign the **next** regulator problem to Smith, Jones and Brown. Let Brown show the inexperienced crew how the task is performed. If that is not feasible, then have the BMT demonstrate the procedure to Smith and Jones.

1-99 ARMOR

TABLE 6 (M60-A) CO : MAINTENANCE TASK PERFORMANCE DATA BY VEHICLE
FOUR WEEK REPORTING PERIOD ENDING: 2155 (4 JUN 82)

VEHICLE BUMPER NUMBER	MAINTENANCE TASKS AND PERSONNEL	CM MAN-HRS	PM MAN-HRS	JULIAN DATE
A11	PERFORM SYNCHRON. CHECK (RAMP METHOD) CRIBBINS,D(45N-E5)	5.6		2121
	REMOVE DEFECTIVE/INOPERATIVE POWERPACK ALEXANDER,J(63N-E2) HOLBROOK,J(63N-E3) LABRADA,L(63N-E1)	40.0		2128
	PMCS		12.4	
A12	REPL SUPERELEVATION ACTUATOR HADDOCK,N(45N-E4)	2.1		2133
	REPL VOLTAGE REGULATOR SMITH,J(63N-E2) JONES,A(63N-E1)	10.2		2134
	REPL VOLTAGE REGULATOR BROWN,J(63N-E5) WHITE,K(63T-E4)	6.4		2136
	PMCS			
A13	REPL M37 SCOPE CRIBBINS,D(45N-E5) HADDOCK,N(45N-E4)	6.4		2140
	REPL TRACK PADS LUCAS,J(19E-E4) MORGAN,W(19E-E1) OSGOOD(19E-E1) SMITHLEY,E(19E-E5)	19.6		2134
	REMOVE POWERPACK TO DO OTHER TASK(S) BURNS,J(63N-E5) LABRADA,L(63N-E1)	9.8		2140
	PMCS			
A14	PERFORM SYNCHRON. CHECK (RAMP METHOD) CRIBBINS,D(45N-E5)	9.1		2140

THIS PAGE INTENTIONALLY BLANK.

1-99 ARMOR

TABLE 10 (63N/T): INDIVIDUAL QUALIFICATION AND EXPERIENCE PROFILE

SIX WEEK REPORTING PERIOD ENDING: 2155 (4 JUN 82)

NAME: SMITH, J(63N-E2)

EQUIPMENT/TASK	QUAL	NO. TIMES	NO. TIMES DONE			
			1	5	10	15
M60 FAMILY - MAINTENANCE TASKS						
1 REMOVE DEFECTIVE/INOP PACK		6	-----+			
2 GROUND HOP POWERPACK		2	--			
3 INST REPAIRED POWERPACK		1	-			
4 REM POWERPACK TO DO OTHER TASKS	Q	17	-----			
5 INSTL POWERPACK AFTER OTHER TASKS	Q	17	-----			
6 REM BACK DECK		1	-			
7 INSTL BACK DECK		0				
8 REPL FUEL LINES &/OR FITTINGS		4	----			
9 REPL FUEL FILTERS		9	-----			
10 REPL OIL COOLER		6	-----			
11 REPL OIL FILTERS		2	--			
12 REPL OIL COOLER LINES		7	-----			
13 ADJ ACCEL, THROTTLE CON/LINKAGE	Q	20	-----			
14 REPL ACCEL, THROTTLE CON/LINKAGE		6	-----			
15 TROUBLESHOOT ELEC SYSTEM		0				
16 REPR WIRING		0				
17 REPL SENDING UNITS OR GAGES		5	-----			
18 REPL CIRCUIT BREAKERS		1	-			
19 REPL BATTERIES, CABLES, CLAMPS		2	--			
20 REPL VOLTAGE REGULATOR		1	-			
21 REPL STARTER		11	-----			
22 REPL GENERATOR &/OR SEAL		4	----			
23 REPL AIR CLEANER BLOWER MOTOR		3	---			
24 REPL BLOWER MOTOR RELAY		6	-----			
25 REPL FAN TOWER SEAL	Q	15	-----			
26 ADJ XMSN LINKAGE		2	--			
27 REPL XMSN SHIFTING CON ASSY		7	-----			
28 REPL FINAL DRV		10	-----			
29 REPL FINAL DRV SEALS		4	----			
30 REPL MASTER OR SLAVE CYLINDER		16	-----			

+ EXPERIENCE GROWTH DURING LAST 6 WEEKS

INVESTIGATIVE ACTIONS

Investigative actions are made to get additional information to help make a better decision. Remember, the first step in the Army decision-making procedure is to collect all pertinent facts within the time available. Usually you will not have all the information at hand necessary to decide on an appropriate and effective corrective action. Although MMIS-86 reports provide information concerning performance and training, practical considerations stop the reports from containing unlimited details on personnel experience. A good maintenance manager must be aware of experience before initiating a corrective action independently.

Investigative actions (questions) may be viewed as diagnostic aids, like meters and gauges. Just as you may use a multimeter to isolate an electrical problem, investigative action helps you define a problem, develop solutions, and select the most appropriate solution from among the alternatives. The need for a manager or supervisor to ask questions is increased if he has limited maintenance experience or background when he is new to battalion maintenance activities. The following are words of advice on this subject from the **Organizational Maintenance Manager's Guide**. (FM-43-1 (Test))

It's tough beginning a new job. It is especially tough taking over something as complex as managing a maintenance operation. The only way you'll learn is by working at it hard. This means you have to ask questions. You may feel a little foolish doing this. You may be concerned that you'll lose face with your subordinates. If this is your concern, then it is an inappropriate one. Your subordinates will respect you much more if you are willing to level with them and ask for their help than if you try to manage their maintenance operation with whatever superficial knowledge you have picked up in the past. (FM 43-1:1-8)

Now look at the example following in which an **investigative action** is the appropriate response to an MMIS-86 report.

THIS PAGE INTENTIONALLY BLANK.

Example 2

Background. Again, place yourself in the position of a maintenance supervisor.

Problem. While reviewing MMIS Table 2 (you receive one for each maintenance section), you notice that the track section fell significantly below average in the past two weeks in terms of hours spent on maintenance. You need to do something about this. What do you do?

Action. Remember, your first step is to gather pertinent information. First, check the MMIS-86 Interpretation Comments. Perhaps the track mechanics had been engaged in special training or assigned to other duties preventing them from doing maintenance. Turning to the Interpretation Comments, you find no explanation for the low maintenance effort in the track section. Your next logical step is to ask the section leader of the track section why his mechanics have not been fully engaged in maintenance.

Solution. The section leader has a valid explanation. He informs you that it was an unusually slow period for track maintenance. His men are highly qualified and they completed their repairs without problems. The section leader also tells you that he initiated a clean-up and organizational effort within his shop during the non-maintenance time. It required a few days, but as you look around you can see the results of the effort and hope it will pay off in increased efficiency. You compliment the section leader for his initiative and the mechanics for their efforts. As you walk away, you are glad you **asked the question** rather than simply ordering the section leader to spend more time on maintenance.

1-99 ARMOR BATTALION

TABLE 2 (63N-ALL): MAINTENANCE MAN-HOURS

SIX-MONTH REPORTING PERIOD ENDING: 3049* (18 FEB 83)

PERIOD END DATE & CYCLE		ROSTER MAN-HRS	TOTAL MAINT. MAN-HRS	MAINT. MAN-HRS PER MAN	
2253	R	400	58.0	5.8	
2260	R	400	103.5	10.4	
2267	R	400	28.3	2.8	v
2274	A	400	77.8	7.8	
2281	A	400	111.9	11.2	
2288	G	400	134.7	13.5	
2295	G	400	227.6	22.8	^
2302	G	400	277.9	27.8	^
2309	A	400	198.3	19.8	^
2316	R	400	39.6	4.0	v
2323	R	400	32.7	3.3	v
2330	N	400	12.8	1.3	v
2337	R	400	9.8	1.0	v
2344	A	400	49.3	4.9	
2351	A	400	27.8	2.8	v
2358	N	400	11.8	1.2	v
2365	N	400	7.8	.8	v
3007	G	504	127.9	10.2	
3014	G	550	397.3	28.9	^
3021	G	574	335.5	23.4	^
3028	R	630	81.3	5.2	
3035	R	630	43.9	2.8	v
3042	R	630	23.3	1.5	v
3049*	A	670	160.8	9.6	
LONG-TERM AVERAGES		449	105.2	9.3	

v = SIGNIFICANT ABOVE AVERAGE

^ = SIGNIFICANTLY BELOW AVERAGE

CONSULTATION

A consultation is similar to an investigative action. While we define an investigative action as a search for information or data, a consultation is defined as a search for a solution to a problem. A consultation **is** a discussion and exchange of information focused on information-seeking, but it is **solution-oriented** rather than data-oriented.

A manager or supervisor may **consult** with his subordinates, his peers or his superiors in order to determine the most appropriate solution to a problem. Also, consultation is frequently used as a management technique to encourage subordinates to solve a problem. In most cases both participants in a consultation bring to the conversation a notion of what they want accomplished and/or how the objective should be attained. But, unlike an individual decision or an inquiry, the result of a consultation may involve a compromise solution.

Remember, consultation is a tool that you use to solve a problem by requesting advice from someone familiar with the problem or by stimulating some action on the part of a subordinate. In this regard, consultation may be like the WD-40 or Liquid Wrench you use to free a tightly-torqued nut. Likewise, you may be fully capable of solving a problem yourself, but that is not always necessary or desirable. Others may be as informed as you are, or even more knowledgeable on certain subjects. It is sometimes important to ask for their assistance.

Consultation can be a useful tool to help you solve management problems. Using consultation to solve a problem, however, is particularly dependent upon the ability to **communicate** effectively. The following example illustrates the use of consultation to solve a maintenance performance problem.

THIS PAGE INTENTIONALLY BLANK.

Example 3

Background. In this example, consider yourself the section leader of the periodic service, inspection and quality control group. Yours is the largest section, consisting of 22 people, and includes four MOS's. Because of the different specialties within your group it is hard to keep track of the skill growth of all your mechanics and technicians. Even though MMIS-86 reports provide you with skill profiles for each person by MOS, when you are busy it is impractical to check through all reports to help decide on task assignments.

Problem. With this in mind, what might you do in response to an individual qualification and experience profile (MMIS Table 10) such as the example on the following page? Peterson is fully qualified on some tasks (note the Q's), but on most tasks he is relatively inexperienced. Since it is difficult for you to remember all those tasks on which he and the other 12 63N/T's in your section require more practice (OJE), you consider giving him and the other inexperienced mechanics copies of their profiles. Then, when jobs come in and conditions permit, mechanics could request assignments that would contribute to their individual skill development. In this way you share the responsibility with your mechanics and reduce your administrative workload. But how should you approach an inexperienced and unsure mechanic with this suggestion?

Action. Following the guidelines to communication outlined previously, you first try to motivate the mechanic to want to hear and understand what you are about to say. This can be accomplished in many ways, depending on the person. You might consider linking the conversation to the mechanic's personal goal of prestige, advancement, respect and recognition by his peers or even relate skill development to employment after his Army career is ended.

Solution. After you have the mechanic's interest, state the problem clearly and concisely, then ask if he has a solution. If he offers a solution, then consider it seriously as one of your alternatives. You already have attempted to anticipate the impact of your communication when you chose to approach the mechanic with your suggestion. All that remains for this to be an effective consultation is for you

1-99 ARMOR

TABLE 10 (63N/T-SVC): INDIVIDUAL QUALIFICATION AND EXPERIENCE PROFILE

SIX WEEK REPORTING PERIOD ENDING: 3049 (10 FEB 83)

NAME: PETERSON, T (63N-E2)

EQUIPMENT/TASK	QUAL	NO. TIMES	NO. TIMES DONE				
			1	5	10	15	20
			+	+	+	+	+
M60 FAMILY - MAINTENANCE TASKS							
=====							
1 REMOVE DEFECTIVE/INOP PACK		6	-----+				
2 GROUND HOP POWERPACK		2	--				
3 INST REPAIRED POWERPACK		6	-----+				
4 REM POWERPACK TO DO OTHER TASKS		4	----				
5 INSTL POWERPACK AFTER OTHER TASKS		3	---				
6 REM BACK DECK	Q	17	-----+				
7 INSTL BACK DECK		17	-----+				
8 REPL FUEL LINES &/OR FITTINGS		4	----				
9 REPL FUEL FILTERS		11	-----+				
10 REPL OIL COOLER		2	--				
11 REPL OIL FILTERS	Q	9	-----				
12 REPL OIL COOLER LINES		1	-				
13 ADJ ACCEL, THROTTLE CON/LINKAGE		19	-----+				
14 REPL ACCEL, THROTTLE CON/LINKAGE		6	-----				
15 TROUBLESHOOT ELEC SYSTEM		2	--				
16 REPR WIRING	Q	0					
17 REPL SENDING UNITS OR GAGES		5	-----				
18 REPL CIRCUIT BREAKERS		1	-				
19 REPL BATTERIES, CABLES, CLAMPS		31	-----				
20 REPL VOLTAGE REGULATOR		9	-----				
21 REPL STARTER		1	-				
22 REPL GENERATOR &/OR SEAL		14	-----				
23 REPL AIR CLEANER BLOWER MOTOR		2	--				
24 REPL BLOWER MOTOR RELAY		1	-				
25 REPL FAN TOWER SEAL		5	-----				
26 ADJ XMSN LINKAGE		4	----				
27 REPL XMSN SHIFTING CON ASSY		3	---				
28 REPL FINAL DRV		10	-----				
29 REPL FINAL DRV SEALS		3	---				
30 REPL MASTER OR SLAVE CYLINDER		9	-----				

+ EXPERIENCE GROWTH DURING LAST 6 WEEKS

to decide from among the alternative solutions and to remain receptive to the mechanic's comments, listening carefully to his specific concerns about the new arrangement you have worked out together.

Another way in which this problem could be solved is to consult with the other section leaders in your battalion. You could simply ask a few of them how **they** would approach this particular problem. Sometimes, two heads are better than one.

STAFF MEETINGS

Staff meetings, such as a scheduled afternoon session attended by the battalion XO, BMO, BMT, and company XO's, provide a ready mechanism for the translation of MMIS data into corrective action. Decisions resulting from group discussion at staff meetings are already a means of improving maintenance performance and training effectiveness. With the addition of MMIS data, the potential for contributing to this improvement is significantly increased.

The Army selects individuals for promotion on the basis of leadership ability and technical competence. Consequently, if you find yourself participating in, or leading, a staff meeting you already have such competence. Along the way you have developed interpersonal and problem-solving skills--abilities that are requirements of effective management. How can these skills be applied in the context of a staff meeting to solve maintenance problems indicated by MMIS-86 reports?

The problem-solving potential of staff meetings is a function of communication among the participants. Typically, relevant decision-makers representing the full range of management concerns are present at staff meetings. Many of the questions that arise during a discussion can be answered immediately. When an answer is unknown, responsibility for that information is often very clear; if responsibility is not obvious, it may be assigned by the meeting leader.

Now look at example 4.

THIS PAGE INTENTIONALLY BLANK.

Example 4

Background. For instance, the battalion XO and the BMO receive an MMIS-86 Table 4 for each company; company commanders receive a Table 4 only for their company. (Table 4 provides summaries of the tank maintenance histories that would be presented in detail in MMIS Table 5). Table 4 is particularly useful in identifying consistently faulty equipment and issues of crew accountability.

Problem. On the example Table 4 provided, you will notice that tank A12 has required nine tasks repeated--many more than any other of A Company's vehicles. Possible explanations are: 1) improper maintenance and repair, 2) improper operation, 3) inordinate use of the vehicle, 4) systematic vehicle problem (it's a lemon), and (4) coincidence.

Action. A staff meeting provides an opportunity to solve this problem rather quickly. The BMO is likely to require information from the BMS or the NCOIC of the track section; similarly, the company executive officer will probably need to discuss the issue with his operators.

Solution. At the next staff meeting, the problem-solving process can continue until the cause or causes have been determined. Then solutions can be developed and evaluated. When the most appropriate solution has been selected, it is then communicated to those responsible for its implementation.

The potential value of group problem-solving is discussed in greater detail in the following section concerning Action Meetings.

1-99 ARMOR BATTALION

TABLE 4 (M60-A CO): COMBAT VEHICLE MAINTENANCE SUMMARY

SIX-MONTH REPORTING PERIOD ENDING: 3077 (18 MAR 83)

BUMPER NUMBER	4-WK AVERAGE FOR PREVIOUS 20 WEEKS				ALL RPTS*	TOTALS FOR CURRENT 4 WEEKS				ALL RPTS*
	MECHANIC TASKS	HR	CREW TASKS	HR		MECHANIC TASKS	HR	CREW TASKS	HR	
A1	5	1.1	20	17.5	-	7	16.9	12	10.5	4
A2	3	6.1	18	15.7	-	5	10.6	11	9.6	2
A11	16	32.5	7	6.1	5	25	52.9	4	3.5	7
A12	19	38.4	5	4.4	9	30	63.4	5	4.3	9
A13	9	18.2	13	11.4	3	14	30.0	9	7.8	5
A14	10	20.2	10	8.7	4	16	33.8	6	5.2	5
A21	7	14.2	12	10.5	2	11	22.2	7	6.1	3
A22	8	16.2	15	13.1	3	12	25.4	9	8.7	4
A23	6	12.1	14	12.3	4	9	19	8	7.0	2
A24	9	18.2	12	10.5	4	15	31.7	7	6.1	6
A31	7	14.2	14	12.3	2	10	21.1	8	6.4	2
A32	10	20.2	10	8.7	3	16	32.8	6	5.2	2
A33	9	18.2	12	10.5	2	14	29.6	7	6.1	3
A34	8	16.2	17	14.9	3	12	25.3	10	8.7	4
AVERAGE PER VEHICLE	9	18.2	12.8	11.2	2.9	14	29.6	7.8	6.8	4.2

ACTION MEETINGS

Research conducted during the development of the MPS(O) identified six motivational factors likely to influence the performance of organizational maintenance:

- Performance measurement and feedback
- Participation in job improvement
- Communication and cooperation
- Preparation for the job
- Responsibility
- Recognition

Identifying these factors helped guide the development of the action-meeting concept. The concept was developed **specifically** to satisfy the requirements of Army maintenance. For this reason, formal action meetings are distinguished in several ways from other methods of problem-solving:

- Action meetings are conducted in an open, non-restrictive atmosphere. Contributions to job improvement and problem-solving are encouraged of all participants.
- Action meetings facilitate communication and improve cooperation. A leader is present to guide, rather than restrict the discussion.
- Action meetings involve the assignment of individual responsibility for tasks decided upon by the group.
- Results of decisions and actions are provided to all participants of action meetings (feedback).
- Action meetings are held **regularly**. There is an advantage in recognizing that a particular action meeting is more than a solitary event--it is part of a continuous process.
- Action meetings are structured. An agenda is necessary to guide the discussion and to ensure that no topics are forgotten.
- Action meetings provide a forum for the recognition of individual and group achievement.

Action meetings are, primarily, a formalized method of group problem-solving. The action-meeting concept is founded on the recognition that, due to

high turnover rates, other operational constraints (e.g., very busy schedules), and the impossibility of being a subject-matter expert on **all** topics, maintenance managers may lack solutions to all the problems they are likely to encounter. The concept also recognizes that subordinates, especially those at the operations level, may have insights and solutions unavailable to their supervisors and managers. Also, group discussion frequently stimulates new ideas; **action meetings are a way of tapping this source of problem-solving activity.**

In terms of our analogy, using action meetings to solve a maintenance problem is like using a crane or A-frame to help you lift heavy equipment. You might be able to do the job on your own, but it is much easier with mechanical help. Similarly, many operational and training problems that **could** be solved by individual managers and supervisors are **better** handled through action meetings. Like a crow-bar, the group problem-solving capacity of action meetings offers leverage to help you solve maintenance and training problems. Through MMIS reports, action meetings are linked to mechanics' skill development and certification programs. Skill profiles are maintained by the MMIS-86 and used by supervisors to allocate personnel to tasks for which they are not yet qualified. Action meetings provide a forum for the discussion of these issues and for the recognition of individual progress in skill development.

Action meetings are held every other week in each battalion maintenance section. Meetings are organized and conducted by the various NCOIC's, or section leaders, for their respective groups. For this reason, **the attitudes and abilities of section leaders--the first-line supervisors--are critical to the success of the action meeting program.** Section leaders are responsible for planning the meeting agendas, for guiding discussions and assigning specific tasks. They are also expected to follow up on responsibilities assigned at previous action meetings and to provide feedback to the group regarding previous actions, recent performance and skill development.

Although the action meeting concept may seem new, it is not. The notion of treating soldiers with dignity and enlisting their support by motivating them and recognizing individual achievement is a very old concept. It is also firmly supported by the Army Management Doctrine (AR 5-1). What is new, however, is organizing the conduct of action meetings into a structured format.

Part II of this **Guide**, which follows, provides a detailed outline to help section leaders prepare for and conduct Action Meetings.

PART II: ACTION MEETINGS

INTRODUCTION

Part II of the **Guide for Maintenance Action-Taking** will provide battalion maintenance section leaders with a blueprint for preparing for and conducting Action Meetings. (Part II is based upon a previous document prepared prior to the implementation of DIV-86 reorganization.)¹

WHY ACTION MEETINGS?

What if you find that the operational readiness rate for your combat vehicles is below the division standard or that your tanks are constantly breaking down? What if you learn that your mechanics spend little time actually performing maintenance? What if you discover that your mechanics don't know how to perform all their maintenance tasks? **How can you best turn this information into actions that will resolve the problem and eventually improve maintenance performance?**

One alternative is for you and your mechanics to get together in an organized way to determine actions that will improve maintenance. This is, in effect, a meeting where you will take some corrective or investigative actions--in other words, an action meeting! In such a meeting you discuss problems, establish goals for improvement and select actions to accomplish those goals. Action Meetings are particularly helpful for the following reasons:

Time. They help you get more done in less time. By spending only a few hours per month you can make use of everyone's maintenance know-how on resolving critical maintenance and training issues, and starting corrective actions.

Information. Your mechanics know many of the causes of maintenance problems, including some you may not know. Action Meetings help get everyone's information out in the open.

Communication. Action Meetings promote efficient communication: down (from you), up (from your mechanics), and sideways (among mechanics themselves). Communicating with each other reduces barriers to effective maintenance performance.

¹Fuller, R. G., & Stuster, J. W. **Maintenance performance system (organizational). Motor Sergeant's action meeting handbook.** Santa Barbara, California: Anacapa Sciences, Inc., Technical Report 465-20, May 1982.

Teamwork. Getting everyone in the maintenance section involved in Action Meetings increases the number of ideas for resolving problems and creates greater support for accomplishing actions started. The interaction in the meeting promotes teamwork through the sharing of information and ideas.

Training. During Action Meeting discussions you will discover what your mechanics **know** and what they **do not know** about their job. This helps you to identify training requirements. Action Meetings are learning experiences in other ways--your mechanics learn from each other and they also learn more about the problems you face in maintenance management.

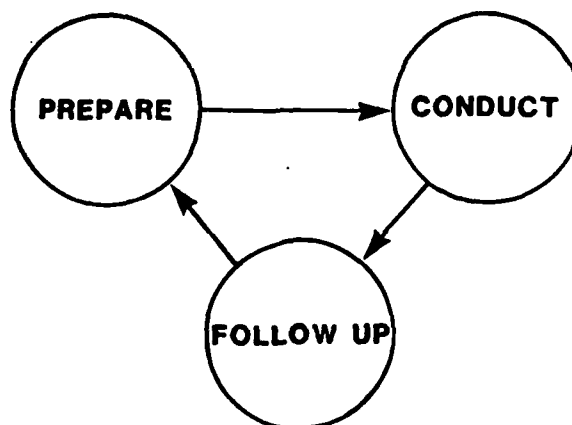
THE PART YOU PLAY IN HOLDING ACTION MEETINGS

You are the leader of Action Meetings. You must guide the meetings and keep them on track. The success of Action Meetings depends on you. Your part in a meeting is to:

- Identify critical performance problems
- Establish your objectives, or goals, for improvement of these problems
- Get your mechanics involved in actions to achieve your objectives.

The basic idea sounds simple--but getting the desired results is not always easy. For example, some mechanics might feel reluctant to "level" with you and with each other. Others may use the meeting to complain and criticize. The meeting might become nothing more than a "bull session." Some people may talk too much and others too little. However, these difficulties can be overcome if you play your part and follow the instructions in this handbook.

Holding Action Meetings is a cycle of three activities--**prepare, conduct, follow-up**--as shown below. The rest of this handbook tells you how to carry out each of these three activities.



PREPARING FOR ACTION MEETINGS

Organized preparation is essential to conducting an effective meeting. The checklist below shows the steps you must take in preparing for an Action Meeting. Each step is discussed in the paragraphs that follow the checklist. Read the discussion to find out what to do for each of the steps. Use the checklist as a guide when you're preparing for an Action Meeting. When all boxes are checked, you are ready to conduct a meeting.

CHECKLIST

PREPARING FOR AN ACTION MEETING

- ☐ **Review progress on previous actions**
- ☐ **Review MMIS reports**
 - Identify performance problems
 - Identify performance improvements
- ☐ **Review other maintenance performance information**
 - Use other reports and observations
 - Tie in with MMIS reports
- ☐ **Decide on your most pressing problem(s)**
 - Define what you want to achieve
- ☐ **Prepare Action Meeting agenda**
 - Feedback
 - Recognition
 - Problems and objectives (in order of priority)
- ☐ **Schedule meeting and notify participants**
 - Location
 - Time
- ☐ **Assemble materials**
- ☐ **Review conduct of last meeting**

If this is the very first action meeting ever held, obviously some of these items can't apply.

1. Review Progress on Previous Actions

You record decisions made at previous meetings and follow up on the progress being made on completing these actions. The first step in preparing for an Action Meeting is to review what progress has been made on previous actions. This review will provide you with the information necessary to provide "feedback," or knowledge of results, at the next meeting.

For example, if you were having a problem getting equipment turned in to your support unit, an action to resolve this problem may be to arrange for a DSU contact team to inspect and repair the equipment in your maintenance area. Review the progress on arranging this action and report it at the next meeting.

2. Review MMIS-86 Reports

The MMIS reports provide maintenance performance information. This information is presented as tables of data. Titles and numbers of these tables are listed below.

Table No.	Table Title
1	● Battalion Maintenance Man-Hour Summary
2	● Maintenance Man-Hours
3	● Average Man-Hours Per Maintenance Task
4	● Combat Vehicle Maintenance Summary
5	● Maintenance Tasks by Vehicle
6	● Maintenance Task Performance Data by Vehicle
7	● Certification, Qualification and Experience Summary by Section
8	● Certification, Qualification and Experience Summary by Individual
9	● Qualification and Experience Summary by Task
10	● Individual Qualification and Experience Profile
11	● Qualification and Certification Bulletin

You receive copies of most MMIS reports every four weeks. When you receive your reports, review them using the **MMIS-86 User Reference Guide** to assist you. As part of your review, make special note of items for discussion at the Action Meeting. Look for differences between current figures and the long-term average that might suggest a maintenance problem. Recognizing a problem is a good start toward resolving it. Also, note changes in performance resulting from previous Action Meetings.

Next, check to see if you can identify what might be causing the problem. On the following pages are examples of MMIS reports. Each report has notes showing a problem indicated by the information on the report, and some possible causes identified from a preliminary investigation. This is the way you should analyze the MMIS-86 reports in concept--although you don't need to write up the results on the report in such a formal way.

1-99 ARMOR BATTALION

TABLE 2 (63N-ALL): MAINTENANCE MAN-HOURS

SIX-MONTH REPORTING PERIOD ENDING: 3049* (18 FEB 83)

PERIOD END DATE & CYCLE	ROSTER MAN-HRS	TOTAL MAINT. MAN-HRS	MAINT. MAN-HRS PER MAN
2253 R	400	58.0	5.8
2260 R	400	103.5	10.4
2267 R	400	28.3	2.8 v
2274 A	400	77.8	7.8
2281 A	400	111.9	11.2
2288 G	400	134.7	13.5
2295 G	400	227.6	22.8 ^
2302 G	400	277.9	27.8 ^
2309 A	400	198.3	19.8 ^
2316 R	400	39.6	4.0 v
2323 R	400	32.7	3.3 v
2330 N	400	12.8	1.3 v
2337 R	400	9.8	1.0 v
2344 A	400	49.3	4.9
2351 A	400	27.8	2.8 v
2358 N	400	11.8	1.2 v
2365 N	400	7.8	.8 v
3007 G	504	127.9	10.2
3014 G	550	397.3	28.9 ^
3021 G	574	335.5	23.4 ^
3028 A	630	81.3	5.2
3035 G	630	43.9	2.8 v
3042 G	630	23.3	1.5 v
3049* G	670	43.9	2.8 v
<hr/>			
LONG-TERM AVERAGES	449	105.2	9.3

PROBLEM

Low maintenance man-hours per man.

**POSSIBLE
CAUSES**

- Mechanics assigned to post support details.
- Mechanics doing Basic Skill Training.
- Mechanics not fully occupied by maintenance activities.
- Mechanics not completing MMIS data collection forms.

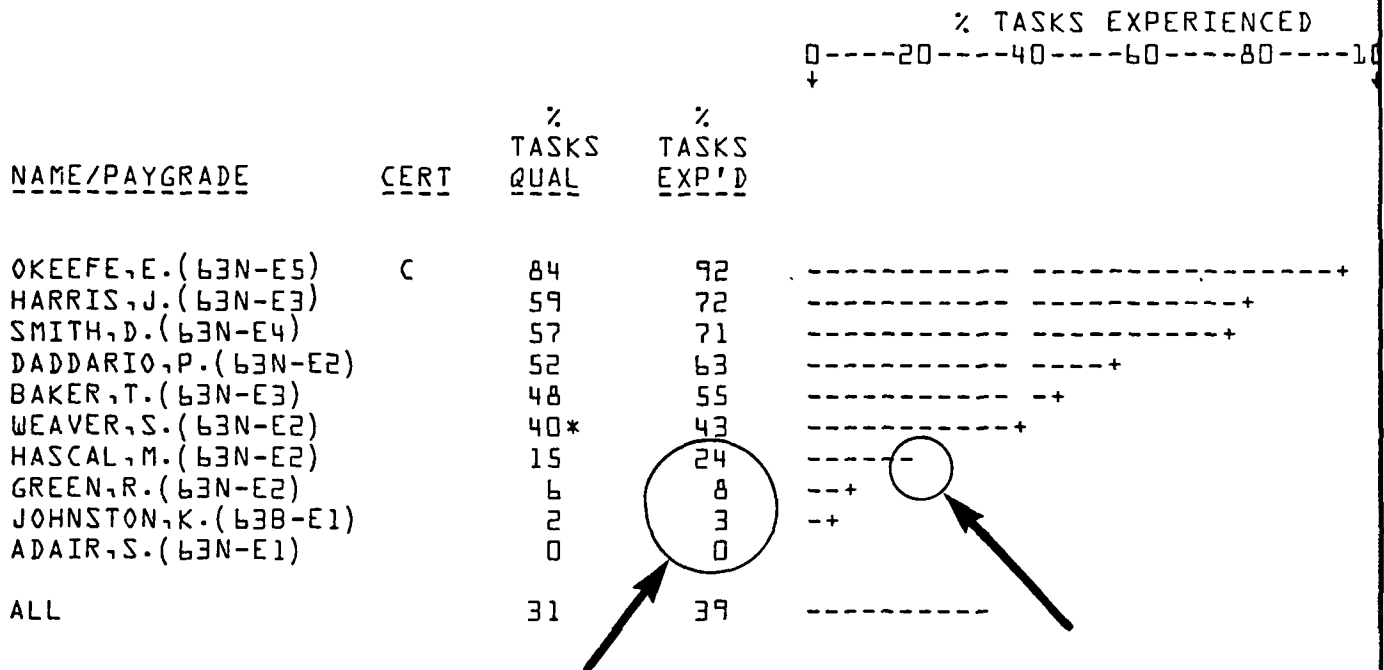
^ = SIGNIFICANTLY ABOVE AVERAGE

v = SIGNIFICANTLY BELOW AVERAGE

1-99 ARMOR BATTALION

TABLE 8: CERTIFICATION, QUALIFICATION AND EXPERIENCE SUMMARY
BY INDIVIDUAL

SIX-WEEK REPORTING PERIOD ENDING: 3083 (4 MAR 83)



PROBLEM

Mechanics lack experience on tasks.

POSSIBLE CAUSES

- Mechanics not available for maintenance work.
- Tasks have not been available for mechanics to perform maintenance work.
- Mechanics lack experience on specific tasks.
- Mechanics are newly assigned to unit.
- Section leader unaware of training deficiency.

* QUALIFICATION GROWTH DURING LAST SIX WEEKS

+ EXPERIENCE GROWTH DURING LAST SIX WEEKS

1-99 ARMOR

TABLE 10 (63N/T-SVC): INDIVIDUAL QUALIFICATION AND EXPERIENCE PROFILE

SIX WEEK REPORTING PERIOD ENDING: 3049 (18 FEB 83)

NAME: RYAN,N(63N-E2)

EQUIPMENT/TASK	QUAL	NO. TIMES	NO. TIMES DONE				
			1	5	10	15	20
<p>NO. TIMES DONE</p> <p>1 5 10 15 20</p> <p>↓ ↓ ↓ ↓ ↓</p>							

M60 FAMILY - MAINTENANCE TASKS

1 REMOVE DEFECTIVE/INOP POWERPACK		6	-----+
2 GROUND HOP POWERPACK		2	--
3 INST REPAIRED POWERPACK		6	-----+
4 REM POWERPACK TO DO OTHER TASKS		4	----
5 INSTL POWERPACK AFTER OTHER TASKS		3	---
6 REM BACK DECK	Q	17	-----+
7 INSTL BACK DECK	Q	17	-----+
8 REPL FUEL LINES &/OR FITTINGS		4	----
9 REPL FUEL FILTERS	Q	11	-----+
10 REPL OIL COOLER		2	--
11 REPL OIL FILTERS		9	-----
12 REPL OIL COOLER LINES		1	-
13 ADJ ACCEL, THROTTLE CON/LINKAGE	Q	14	-----+
14 REPL ACCEL, THROTTLE CON/LINKAGE		6	-----
15 TROUBLESHOOT ELEC SYSTEM		2	--
16 REPR WIRING		0	---
17 REPL SENDING UNITS OR GAGES		5	-----
18 REPL CIRCUIT BREAKERS		1	-
19 REPL BATTERIES, CABLES, CLAMPS	Q	31	-----
20 REPL VOLTAGE REGULATOR		9	-----
21 REPL STARTER		1	-
22 REPL GENERATOR &/OR SEAL		14	-----
23 REPL AIR CLEANER BLOWER MOTOR		2	--
24 REPL BLOWER MOTOR RELAY		1	-
25 REPL FAN TOWER SEAL		5	-----

PROBLEM

Mechanic has low level of skill on specific tasks.

POSSIBLE CAUSES

- Mechanic not available for maintenance work.
- Mechanic is new to unit.
- No time available to check him out on tasks.
- Section leader unaware of specific deficiencies.

+ EXPERIENCE GROWTH DURING LAST 6 WEEKS

3. Review Other Maintenance Performance Information

You receive maintenance performance information from other sources besides MMIS-86 reports. Some written information include: AOAP lab results, DA Form 2404's from battalion dispatch and DSU inspections, and MCS printouts.

You may also get information by telephone or face-to-face from the BMO, the BMT, company XO's, your mechanics and tank commanders. Comments like "all companies are experiencing failures with DX rebuilt parts" may be made by the battalion maintenance technician.

Your own observations during final checkouts help you assess how well your mechanics are performing repairs. Use your observations and all other written and oral reports to help identify additional indicators of maintenance problems.

4. Decide on Your Most Pressing Problem(s)

Make a list of all the maintenance performance problems you've identified from your review of MMIS-86 reports and other maintenance performance information. Review the list of problems and determine which ones are the most important or critical. Then, re-list the problems in order of priority, with the most important ones at the top of the list.

The next step is to establish an objective, or goal, for improvement of each problem. For example, if your problem is that the skill level of your mechanics is too low, your objective might be "Qualify each mechanic on at least one task during the next month." Your objectives are the goals or targets of actions that will be developed during the meetings.

5. Prepare an Action Meeting Agenda

A key step for a successful meeting is preparing an agenda, or outline, for conducting the Action Meeting. Prepare the agenda by listing the topics in the order you want to discuss them.

Your first topic is **"feedback"** or knowledge of results, letting everyone know progress being made on previous actions. The second topic is **recognition of people** whose performance has been above average or who have accomplished something special. These two topics should be short and direct. Cover them first so you can get to the "meat" of the meeting--deciding on actions to solve maintenance problems.

Use your list of critical problems and objectives developed in step 4 above to make up the rest of your agenda. Put your top problem and objective on the agenda. Below that, write in possible causes of the problem you've identified in one-word short format. List only those causes that you and your mechanics can do something about. Don't bother with listing ones you can't correct at your level. As a reminder, also make notes to ask the group to identify other causes and suggest possible actions to correct the problem. Repeat this sequence for each additional problem and objective. (During the meeting, when specific actions have been selected, record them and the responsibilities assigned for their completion in your Action Meeting notebook.)

The agenda doesn't have to be fancy--handwritten notes will do. An example of an agenda is shown on the next page. Use the same format when you prepare **your** agenda.

6. Schedule Meeting and Notify Participants

Now that you're prepared for the next Action Meeting, select a location for the meeting that is free from distractions and interruptions. You don't want outsiders walking through the meeting, and you don't want to be interrupted by telephones. It is a good idea to hold the meeting early in the morning or right after the noon formation, not at the end of the day when everyone is anxious to go off duty. After setting the location and the starting time, notify the mechanics and other participants where and when the meeting will be held.

7. Assemble Materials

Assemble the materials you will need in the meeting and have them available at the time of the meeting. For example, if you're going to discuss an MMIS-86 report, you may want everyone to have a copy of the report. If so, get copies of the report made in advance. Encourage everyone to bring paper and pencil to the meeting, but have spares available for those who don't.

EXAMPLE

- AGENDA FOR ACTION MEETING - 19 April

1. PROGRESS ON PRIOR ACTIONS:

- SPECIAL TOOL ISSUE SIMPLIFIED
- DS CONTACT TEAM WILL DO INSPECTIONS IN CO. SHOP STARTING NEXT WEEK.

2. RECOGNITION:

- MORALES DID GOOD JOB ON 32 LAST WEEK
-- GETS FRIDAY P.M. OFF
- ROBERTS FINISHED OJT PROGRAM
2 WEEKS EARLY

3. PROBLEM -- MECHANICS NOT QUALIFIED ON SPECIFIC TASKS OBJECTIVE -- QUALIFY EACH MECHANIC ON AT LEAST ONE TASK PER MONTH

POSSIBLE CAUSES:

- TOO BUSY WORKING TO PAY ATTENTION TO 'QUALIFICATION'
- LACK EXPERIENCED MECHANICS TO DEMONSTRATE TASK PERFORMANCE

OTHER CAUSES?

ACTIONS TO CORRECT?

4. PROBLEM -- LOW MAINTENANCE MAN-HOURS PER MAN

POSSIBLE CAUSES:

- MECHANICS ASSIGNED TO OTHER DUTIES
- MECHANICS NOT COMPLETING REQUIRED PAPERWORK.
- MECHANICS WORK TOO SLOWLY

OTHER CAUSES?

ACTIONS TO CORRECT?

8. Review Conduct of Last Meeting

Before your meeting, review how the last meeting went. Did you manage it effectively? Did you accomplish everything that you intended to? What were some of the problems in that meeting? How could you handle them better or avoid them in the meeting you are about to hold? Holding Action Meetings is a skill you have to learn. Use the results of this review to help you learn and improve your conduct of the meeting.

CONDUCTING ACTION MEETINGS

After you have completed your preparations, you are ready to hold an Action Meeting. In conducting the meeting, remember that you are the leader of Action Meetings, but most of the suggestions for **action** must come from the other participants. To make the meeting effective, you must guide the discussion and keep it on track, but also let others express their ideas.

When conducting a meeting, encourage your mechanics to speak freely and openly--without restraint, fear of retribution or embarrassment. This is the first step to real communication in the meeting. To achieve this, you must **listen** to what they have to say, not just hear and respond. Listening means that you try to view the problem as they see it, not as **you** see it. Listening also means not immediately responding with your opinion or judgment. Keep an open mind, and don't make hasty evaluations.

The checklist on the next page shows the steps you should follow to conduct an Action Meeting. Use the checklist as a guide when you are conducting a meeting. Each step is discussed in the paragraphs that follow the checklist. After the discussion there are some "Meeting-Management Hints" for handling possible difficulties you may encounter during a meeting. Review this information before you hold a meeting.

CHECKLIST
CONDUCTING AN ACTION MEETING

- ☐ **Provide feedback and recognition**
 - Inform mechanics of battalion maintenance performance
 - Report progress on actions
 - Recognize special achievements
- ☐ **Present problem and your objective for its improvement**
- ☐ **Identify causes and possible actions**
 - Identify causes you can correct
 - Accept all suggestions for correction
 - Discuss each suggested action
- ☐ **Select specific actions**
- ☐ **Determine methods and resources**
 - How to do action (method)
 - What you need to do it (resources)
- ☐ **Assign responsibility**
 - Who will do it
 - What will be done
 - When it should be completed
- ☐ **Record key points**
 - Actions to be taken
 - Responsibilities for completion

(Repeat sequence for each problem and objective)
- ☐ **Summarize results**

The following paragraphs provide detailed guidance in completing each of the items on this checklist.

1. Provide Feedback and Recognition

Mechanics want to know what's going on, and want knowledge of results or "feedback." Start the meeting by giving your mechanics a glimpse of "the big picture." Then report any progress on completing previous actions. This keeps everyone informed on what is happening. It also reinforces the Action Meeting concept by showing that the meetings serve a purpose and do accomplish results.

A mechanic also likes to know how he is doing on an individual basis. Recognize those mechanics whose job performance or achievement are above average. Tie recognition to specific accomplishments. For example, it's much better to say "Morales, you did a good job repairing Tank 32 last week," rather than "Morales, you're doing a good job." In the meeting, be careful to keep your recognition positive, or favorable. Save negative, or critical, comments for a private session with the individual concerned.

When you give feedback and recognition you must mean what you say. Keep it simple and direct--don't "shovel it on." And don't give pats on the back to people who haven't earned it.

Individuals who receive feedback and recognition usually perform better. You can add to this effect by occasionally giving a reward to someone qualified. Time off is a reward that is appreciated and is something that's in your power to give. Another type of immediate reward you can give is letting exceptional mechanics have more independence or more authority. You can also vary their job assignments, and provide deserving mechanics special opportunities for learning advanced skills.

2. Present Problems and Objectives

You identified maintenance performance problems and your objectives when you prepared for the meeting. The problems are ones you identified from MMIS reports, other maintenance reports, your observations and experience or information from other sources. Objectives are your goals for improvement of these problems. Now is the time to present these problems and objectives, **one set at a time**, in order of their priority. Doing this takes a few simple statements from you, like:

"The reports show that our skill levels are too low. This means that if we were called into combat, we might not be able to repair our equipment quickly. I want to systematically improve our maintenance skills. I want to qualify each mechanic on at least one new task each month."

3a. Identify Possible Causes of Problems

The next step is to ask the group for suggestions on possible causes or reasons for the problems you've identified, and possible actions you and your mechanics can take to correct them. A problem may have several causes, only one or two of which you can correct. For instance, we have been using the example of low maintenance skills in this handbook. A possible cause of this problem is that the OJT program is too crowded. Or it might be that your workload is too high and you cannot afford to let your inexperienced mechanics go to be trained. Another cause of the problem may be a high turnover rate in your battalion--all you have to work with are entry-level mechanics. That's a problem **you** can't correct. So, limit the discussion to problems that you and your mechanics can solve.

3b. Identify Possible Corrective Actions

Ask for suggestions on actions that will solve the problems. Be open to all suggestions. Don't discourage them by saying things like, "I've tried that before and it won't work." Also, don't let others criticize someone who makes a suggestion that appears to be impractical.

Write down each action suggested so that it can be discussed in turn. If a blackboard is available, list the suggestions on it so everyone can see them. For example, possible actions to improve mechanics' skills are:

- Conduct OJT for mechanics.
- Request training assistance from the MAIT.
- Ask the battalion maintenance technician for training help.

4. Select Specific Actions

The next step is to select specific actions to take. These actions usually stand out or become apparent during the discussion of the various alternatives. The type of action will vary with the objective you want to attain. Examples of possible types of actions are:

- Changing procedures
- Scheduling training
- Revising work assignments and responsibilities
- Concentrating group effort
- Requesting command assistance

Decide on **what** actions to take, then determine the **how** and **who** to do them.

5. Determine Methods and Resources

Once specific actions have been selected, then determine methods and resources needed for each action selected. **Methods** means "how do we do it?" **Resources** means "who and what do we need to do it?"--people, money, time, tools, etc. This is a critical part of the problem-solving process, and may generate a lot of discussion. It may be clear to everyone what should be done, but the method of doing it and getting the resources to do it may not be so clear or easy to accomplish. In particular, the limit on resources may be partly the cause of the problem you began with.

You may have to take an active role in the discussion to help the group decide on methods and resources. Leading the discussion and not overpowering the participants is a skill that will improve with practice.

6. Assign Responsibility

Assign responsibilities for accomplishing each action to mechanics and other group members as much as possible (rather than doing everything yourself). This gives the persons assigned responsibility a feeling of personal involvement in the actions of the group. Giving your mechanics a chance to perform in a unique way also demonstrates your confidence in them and provides additional recognition.

When you assign responsibility, clearly define **what** should be accomplished and **when** it should be completed. Leave the details on **how** the action should be accomplished to the individual, unless he asks for help.

7. Record Key Points

Keep your Action Meeting notes in the special notebook provided. During the Action Meeting, write down key points of the meeting in your notebook.

Examples of key points are the **actions** to be taken and **who** is responsible for various tasks. Your agenda and record of key points serve as a reference for follow-up and preparation for the next meeting.

8. Summarize Results

At the end of the meeting, **briefly** summarize the results of the meeting. Use your meeting notes to recap the actions decided and remind individuals of their responsibilities for task completion.

Meeting-Management Hints

Here are some hints to help you conduct your Action Meetings more effectively. Review these hints prior to your meeting as preparation for some of the pitfalls in meetings and ways you can overcome them.

Person Talks Too Much (The "Know it All"). In most groups there is usually someone who thinks he has all the answers and tries to take over the discussion. If left alone, such a person will usually find out he is in difficulty and be quiet but that may take too long. Simply telling the person to shut up will create conflict and hard feelings. Try something like "Okay, I know what you have in mind, but we haven't heard from Roberts yet. Let's hear what he has to say." By firmly shifting the focus to another person or another subject you can prevent an individual from dominating a discussion.

Person Does Not Participate (The "Silent One"). Some people sit back in silence at a meeting. They may have good ideas but, for various reasons, hesitate to speak out. Refer to such a person by name but don't shine a spotlight on him by saying something like, "We haven't heard from you, Martinez." That may seem threatening. Instead, try an indirect approach such as, "How about sharing your thoughts with us, Lewis, if you're ready." That gives Lewis a chance to speak, but also a way out if he chooses. If Lewis still remains quiet, come back to him later. At least he will feel included in the group and part of the process; he may have something to add later in the meeting.

Arguments ("Feuding, Fussing & Fighting"). Problem-solving discussions often get heated, and turn into arguments between two or more group members with strongly-held views. Discussion is what you want, not harsh words. Any

argument shuts others out of the discussion and stops all progress toward a solution.

One way of handling this situation is to suggest, "Okay, we've heard your views. How about hearing from someone else?" Then ask another person, by name, for his opinion. If that doesn't work or if the argument is particularly intense, introduce a new topic and return to the subject of the argument after tempers have cooled.

Personal Attacks ("Getting Nasty"). It is important to remember, and to remind your men, that personal comments and criticism are not allowed in Action Meetings. Working toward a common goal of maintenance performance improvement and combat readiness is the primary issue. Try to overlook disagreeable aspects of any individual's personality and focus attention on group objectives.

Someone may take advantage of the unique environment in a meeting to criticize or challenge you. It is unwise to take such criticism personally. Don't respond by counterattacking or attempting to justify yourself. Sometimes silence is your best course of action. The attacker may run out of steam and/or someone else may defend you. If not, a response from you like, "It's useful to know how you feel," or "I'll take note of that" may be difficult but it is the best and most mature course of action.

Quick Judgments ("Your Idea Won't Work"). The objective of Action Meetings is to use your mechanics as a source of fresh ideas and solutions. If you interject **your** opinion and judgments too early in a discussion it will inhibit participation by your men and shut off the flow of new ideas and approaches. There is a time for judgment, but the primary skill you should use is your ability to involve your men in problem resolution.

Someone to Lean on (A "Yes Man"). Paying too much attention to someone who supports your position on an issue is understandable, but it may undermine your credibility with the others. Avoid locking-in on a "yes man." Treat all participants equally when leading a discussion.

Self-help.

- Keep things simple and basic.
- Stick to subject--don't wander.

- Be patient and low-key.
- Think before you speak--sounds easier than it is.
- Keep the meeting as short as possible--don't let it drag on.
- Leave a back door open--that is, don't commit yourself to a single course of action.

Problem-solving Tips. Using a group of people to stimulate the production of ideas is always more effective than trying to generate ideas alone.

Before starting, it is very important to identify what topics will be discussed. Your agenda is critical to the success of the meeting. If it is possible, make copies and distribute them to your group **before** the meeting. This will give them the opportunity to think about the problem areas and perhaps have several ideas ready for the discussion.

Action meetings work best when certain guidelines or rules are followed. As leader, you should review these rules with your group before each meeting. For instance, explain that when an idea is offered, no evaluation should occur until all the ideas on that topic have been suggested. Also, you may want to assign someone the responsibility of writing down all suggestions while **you** lead the discussion.

After the group has run out of suggested solutions to a problem, they could formally vote on each idea. You record the votes next to the solutions. Members can vote for as many ideas as they believe have merit. Only supporting votes are recorded; no one is asked to vote against a suggestion. However, more practically, you might informally try to get a feeling for the majority opinion even by a show of hands.

Now you and the group can focus on a few possible solutions--those receiving the most votes or group consensus--rather than dealing with the confusing complexity of all possible solutions.

Strive for freedom of expression to maximize the effectiveness of the team approach to problem-solving. **No** idea should be treated as stupid. To criticize or belittle someone is a sure way to stifle creativity. Remember, for some it may be their first attempt to speak out in public. That requires courage. Be patient. Welcome and encourage their participation. For action meetings to work, you need the entire group's enthusiastic support. To this end, "no-rank" informality should be encouraged to enhance the climate for creativity and cooperation.

ACTION MEETING FOLLOW-UP

Following up on what happened during the meeting is an important part of the Action Meeting process. As General Bruce C. Clark once said: "People only do what the boss checks."

The checklist below shows the steps in following up the actions decided at the meeting. Use the checklist as a guide in your follow-up. Each of the steps is discussed in the paragraphs that follow the checklist.

<p style="text-align: center;">CHECKLIST ACTION MEETING FOLLOW-UP</p> <ul style="list-style-type: none"><input type="checkbox"/> Review conduct of meeting<ul style="list-style-type: none">- Difficulties you had- Ways meeting could be improved<input type="checkbox"/> Monitor progress on completing actions<ul style="list-style-type: none">- Use the record of key points- Check progress frequently- Complete your own tasks<input type="checkbox"/> Identify changes in performance data over time<ul style="list-style-type: none">- Review new MMIS-86 reports- Review other maintenance performance information<input type="checkbox"/> Use results of follow-up to prepare for next meeting
--

The following paragraphs discuss, in turn, each of the items on this checklist.

1. Review Conduct of Meeting

Immediately after the meeting, take time to review the notes you made during the meeting. Also, think about what happened during the meeting--how it went and what difficulties you had conducting the meeting. Consider ways you could have improved the meeting and your performance as its leader. Write down

your thoughts in your meeting notebook so you can refer to them later when preparing for the next meeting.

2. Monitor Progress on Completing Actions

Getting members of the group to agree on an action and assigning responsibility for completion does not guarantee that the action automatically gets accomplished. You must follow up by monitoring the progress made in carrying out the maintenance improvement actions.

Use your record of key points made at the Action Meeting as a guide in monitoring progress. Your record should tell you who is responsible for carrying out each action, and when that action should be completed. Don't wait until the scheduled completion date to check the status of completion. You may find out that nothing has been done yet. Instead, check on the progress every few days. This will let the person responsible know that you're interested and it will encourage him to get the action completed. If you are responsible for a particular action, make certain that you follow through. Setting the example is a trait of a good leader.

Monitoring progress is also essential to your providing feedback at the next Action Meeting. To keep the group informed, you must know the results of previous actions.

3. Identify Changes in Performance Data Over Time

Noting changes in performance data is another way to follow up on the results of Action Meetings. You may have identified a maintenance or training deficiency from the performance data and brought it up at an Action Meeting. Agreement to take certain actions was reached at the meeting and these actions were put into effect. Monitoring changes in performance or training data over time may tell you whether or not these actions achieved your objective.

4. Use Results of Follow-up to Prepare for Next Meeting

Use the results of your follow-up when you prepare for the next Action Meeting. List progress on completing actions. Identify improvements in performance that result from taking action.

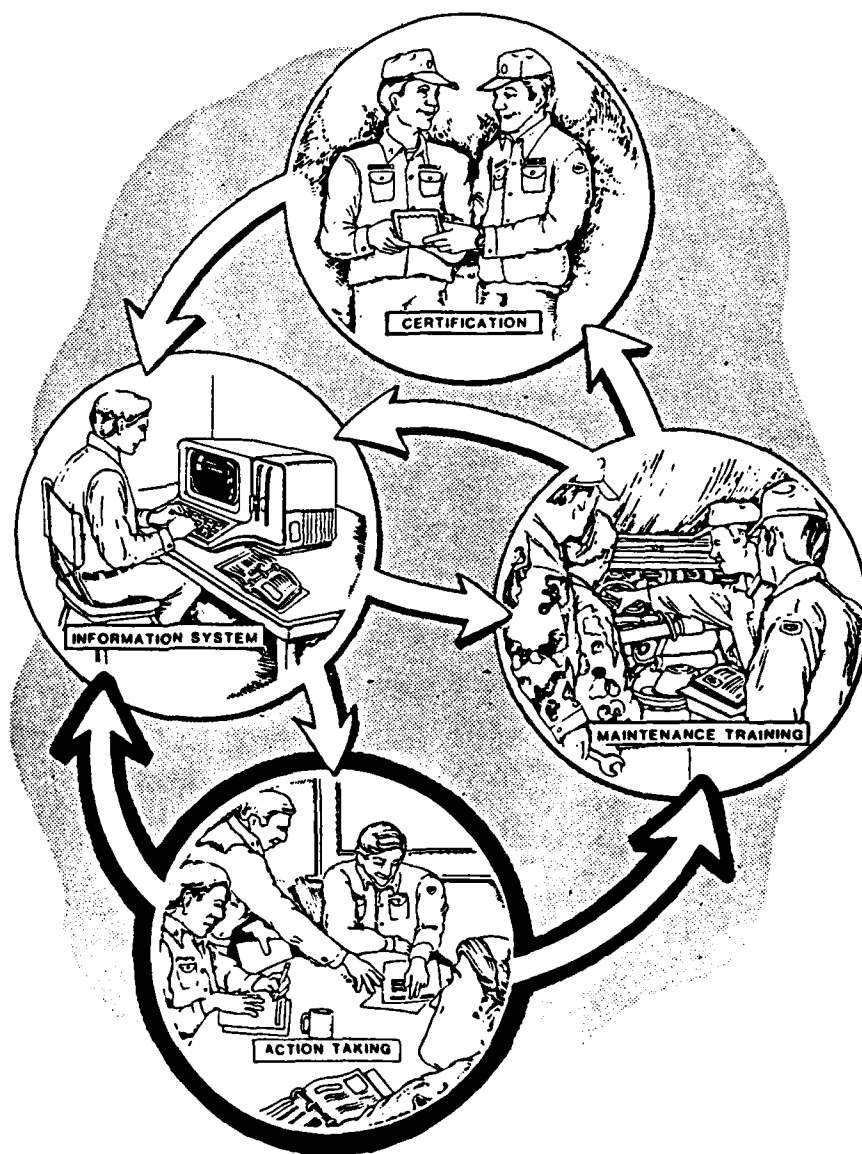
APPENDIX A
THE MAINTENANCE PERFORMANCE SYSTEM
(ORGANIZATIONAL) -- OVERVIEW

THIS PAGE INTENTIONALLY BLANK.

APPENDIX A

THE MAINTENANCE PERFORMANCE SYSTEM (ORGANIZATIONAL) -- OVERVIEW

The MPS(O) is a tool designed to aid Army managers in the improvement of maintenance performance and training effectiveness. The MPS(O) consists of four interrelated components: 1) information system, 2) skill development, 3) mechanic certification, and 4) action-taking. The interaction among these components is illustrated in the accompanying diagram. As you can see, each component of the system plays an important role. Other documents have been prepared describing each component of the system in detail. Although this document is focused on action-taking, it will be helpful to review the function of the other components of the system.



Information System. The heart of the MPS(O) is the Maintenance Management Information System-DIV 86, the MMIS-86. The MMIS-86 is a system designed to gather, organize and distribute a variety of information valuable to maintenance managers and supervisors. Data are stored in a small computer. The information provided by the 11 MMIS-86 reports is not only specific and immediately useful, it is also unavailable from any other source. This is because the system collects and stores the details of equipment maintenance histories, individual work experience, measures of task performance and mechanic qualification. By organizing and tracking the maintenance experience of individuals and vehicles **automatically**, the MMIS-86 offers managers and supervisors information that was previously available only to "long-termers" in that job. **That is, the MMIS-86 offers the accumulated familiarity with specific vehicles and mechanics that previously only years of operations-level experience could provide.**

Skill development. Much of the information contained in MMIS-86 reports concerns mechanics' formal training and on-the-job experience. These continuously updated skill profiles can be used by supervisors to guide the allocation of manpower in order to more effectively develop individual competence and overall readiness. In this way, the MMIS-86 is linked to programs of on-the-job training (OJT), on-the-job experience (OJE), and certification.

Certification. A certificate of merit is awarded to mechanics when they have demonstrated proficiency in the performance of their MOS tasks. Proficiency is defined as the successful completion of the formal battalion OJT maintenance program. Certification may also result from a mechanic's accumulated qualification on tasks performed under normal maintenance operations (OJE).

Certification serves at least four purposes:

- Certification provides positive reinforcement for conscientious and dedicated skill development.
- Certification provides an incentive to novice mechanics to improve their levels of proficiency.
- Certification adds a measure of professionalism and personal pride to jobs that are frequently unappreciated by those unfamiliar with the importance of maintenance activities.
- Certification serves as an indicator to senior managers of maintenance readiness.

Action-taking. The information contained in MMIS-86 reports, and the associated skill development and certification programs, are of no value whatsoever if maintenance managers lack the motivation and skill to use them. The action-taking component of the MPS(O) provides the mechanism for translating MMIS reports and information from other sources into actions designed to improve maintenance performance and overall readiness.

The Context of Battalion Maintenance

Under DIV 86 structure, equipment maintenance for all companies is centralized and performed by battalion maintenance personnel. To accomplish this mission, the battalion maintenance workforce is divided into sections. Each shop specializes in a particular aspect of maintenance activity.

The following table lists the battalion maintenance sections along with the **approximate** numbers of personnel assigned to each. The sections range in size from the 6 technicians forming the commo section to the nearly two dozen personnel assigned to the inspection, service and quality control group. The inspection, service and quality control group and the recovery vehicle shop are the only sections composed of more than one MOS.

BATTALION MAINTENANCE SECTIONS AND PERSONNEL MOS			
Section	Number of Personnel	MOS	Title
Turret	8	45N/T	Turret Mechanics
Track	14	63N/T	Tank Systems Mechanics
Wheel	10	63B/S	Wheeled Vehicle Mechanics
Radio	6	31V	Communications Technicians
Recovery	14	63N/T	Tank Systems Mechanics
Inspection, service and quality control	12	63N/T	Tank Systems Mechanics
	8	63B/S	Wheeled Vehicle Mechanics
	2	45N/T	Turret Mechanics
	1	31V	Communications Technicians
Supply	10	76D	PLL/TAMMS Clerks

Each section is assigned an NCOIC, or section leader, to allocate available work, to supervise maintenance operations, and to guide the skill development of the mechanics and technicians. Section leaders answer to the battalion motor sergeant (BMS) who functions as a "chief foreman," coordinating the maintenance activities of the several sections. The battalion motor officer (BMO) is ultimately responsible for the management of battalion maintenance. In most cases, the BMO is usually the only person in the battalion with an overall perspective--"the big picture"--concerning maintenance. The BMO inevitably relies heavily upon the technical expertise of the section leaders, the BMS and, in particular, the battalion maintenance technician (BMT). The BMT plays a central role in the solution of unusually difficult problems and in the supervision of on-the-job training (OJT).

A variation on the centralized control and conduct of maintenance required by DIV-86 is to assign mixed-MOS maintenance teams to each company so maintenance may be conducted on company vehicles at the company location. This is a garrison version of what will happen (under DIV-86) when companies are detached from the battalion during field exercise and actual combat.

The physical context or conditions of armor maintenance vary with the garrison and location, but working conditions at the organizational level are usually bad. Maintenance of heavy equipment is intrinsically difficult and dirty work. This difficulty is compounded by adverse field conditions, limited resources and deficiencies in mechanics' training.

Mechanics are painfully aware that their contribution to overall combat readiness is often unappreciated and under-valued. Although the MPS(O) cannot alter the nature of battalion maintenance work, it can significantly improve motivation and improve maintenance effectiveness. Enhanced training effectiveness and individual skill development are primary objectives of the MPS(O). Parts I and II of this document are devoted to illustrating the processes by which you can use the MPS(O) to improve maintenance performance, training effectiveness, motivation, and the welfare of **your** troops via problem recognition followed by corrective action.

APPENDIX B
IMPLEMENTATION PLAN
FOR MPS(O) ACTION-TAKING

THIS PAGE INTENTIONALLY BLANK.

APPENDIX B

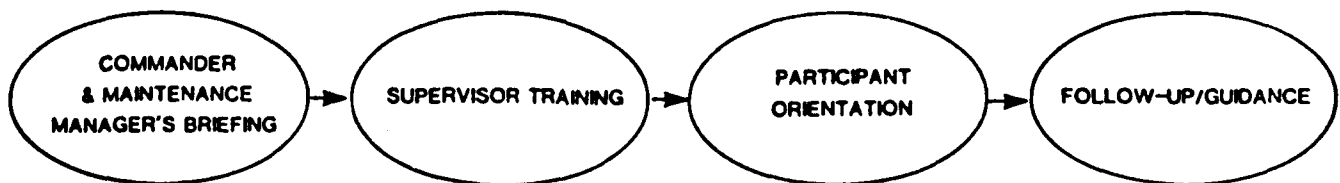
IMPLEMENTATION PLAN FOR MPS(O) ACTION-TAKING

The implementation plan described here is a blueprint for introducing the action-taking component of the MPS(O) to Army units in the future. We foresee the users (audience) of the plan as being ARI staff or Army personnel assigned the responsibility for introducing the MPS(O) to new units.

The implementation of the action component of the MPS(O) requires that the Maintenance Management Information System (MMIS) is in the field first. During the introduction of the MMIS, maintenance personnel are instructed in the interpretation of maintenance reports, leading to the identification of potential vehicle problems and training deficiencies. MMIS user reference manuals are provided to assist the review of MMIS reports.

After the MMIS has been operating for approximately four weeks, sufficient data will have been accumulated to generate meaningful MMIS reports. This is an appropriate time to implement the action-taking component and to introduce all maintenance personnel to ways whereby MMIS information is translated into corrective action. Managers will be familiar with the traditional forms of problem-solving (individual actions, investigation, consultation and staff meetings), but the **action meeting** concept is somewhat unique and will require special attention to ensure successful implementation. For this reason, the implementation plan focuses upon the conduct of action meetings.

The plan for implementing the action component of the MPS(O) consists of the four phases, illustrated below:



Each phase is described below.

Commander and Maintenance Managers' Briefings

The battalion commander, battalion executive officer (Bn XO), operations and training staff officer (S3), and the battalion motor officer (BMO) must be briefed on the overall strategy behind action-taking and its relationship to other components of the MPS(O). By the time this briefing is conducted, these officers will already be familiar with the MMIS from previous briefings. The purpose of this meeting will be to provide the senior maintenance managers with an overview of the action component of the MPS(O) and a description of the concept of action meetings. The commander and maintenance managers' briefing should require approximately 30 minutes to present. An outline of the briefing is presented as Exhibit A to this document.

Supervisor Training

The primary objective of this phase of implementation is to provide section leaders with necessary skills to conduct action meetings. The training will cover the topics below:

- **Why Action Meetings?**
- **Holding Action Meetings**
- **Meeting Management**
- **Planning the First Action Meeting**

The lessons provide an overview of the action meeting concept and its objectives. The **Guide for Maintenance Action-Taking** containing specific guidelines to aid supervisors in the planning and conduct of action meetings is also provided. Section leaders also practice preparation of the agenda for their first action meeting under guidance of a member of the MPS(O) implementation team.

Supervisor training has been developed primarily for section leaders. However, it is useful for the BMO, BMT and BMS to attend the training so they fully understand the significance of the action-meeting concept.

Supervisor training should require between 3 and 4 hours to complete. Outlines of the four modules included in the training are attached as Exhibit B.

Participant Orientation

Next, a brief orientation is provided to all mechanics who are potential participants of action meetings. The orientation will include discussions of the purposes of action meetings, the roles to be played by participants and the potential benefits of active participation in the program.

The participant orientation should require approximately 20 minutes to present. An outline of the orientation is included as Exhibit C.

Follow-up/Guidance

Members of the MPS(O) implementation staff will be available to serve as facilitators during the initial action meetings conducted by each shop or work group. Since this approach to action-taking is unique in maintenance operations and maintenance supervisors may lack experience in leading group discussions, we expect a few meetings to occur before productive results are seen. This is why a facilitator (someone experienced in group dynamics) should be present during the initial meetings to assist the supervisor by stimulating, guiding and terminating discussion **only when necessary**. As the supervisors become skilled in drawing information from the participants, the facilitators' role will lessen and eventually disappear.

The information in the exhibits which follow is keyed to the topics covered in Part II of this guide.

THIS PAGE INTENTIONALLY BLANK.

**EXHIBIT A:
NOTES FOR COMMANDERS' AND MAINTENANCE
MANAGERS' BRIEFINGS**

TOPIC	NOTES
● Types of Actions	Individual prescriptive actions Investigative actions Consultation Staff meetings Action meetings (focus of this session)
● What are Action Meetings?	Framework for collective maintenance problem-solving Opportunity to transform informa- tion on maintenance problems into actions to improve per- formance and readiness
● Benefits of Action Meetings	<ul style="list-style-type: none"> - Improved maintenance performance via: <ul style="list-style-type: none"> Use of time (more accomplished in less time) Exchange of information (increase knowledge) Communication (reduce barriers) Teamwork/communication Training - Feedback on performance <ul style="list-style-type: none"> How well they are doing, need specific information, with- out feedback, one can't learn - Performance measurement/quality control <ul style="list-style-type: none"> No check, chance of no results - Recognition/appreciation/motivation <ul style="list-style-type: none"> Informal, immediate has more impact than formal delayed Frustration from lack of recognition How often have you heard "I know a better way"? Feeling that directives are not effective

TOPIC	NOTES
● Action Meetings Provide—	<p>Perceptions that higher authority doesn't understand situation</p> <p>Involvement in problem resolution Identification with group Feeling of participation (belonging) Emphasis of importance of maintenance to overall readiness Increase in job satisfaction</p>
● Who Shall Participate	<p>Section leaders and mechanics, at all action meetings, occasionally TAMMS, PLL clerks, DSU staff</p>
● Action Meeting Administration	<p>Locate in quiet area near maintenance shop Hold meetings on same schedule as report distribution Allocate about 1 hour for meeting</p>
● Commanders' and Managers' Roles	<p>Don't attend, will inhibit free flow of information</p> <p>But do provide command support (vital to success),</p> <p>Permit, encourage, direct personnel to attend</p>

**EXHIBIT B:
NOTES FOR SUPERVISORS/SECTION
CHIEFS TRAINING ON CONDUCT OF
ACTION MEETINGS**

SECTION 1: BACKGROUND

TOPIC	NOTES
● Types of Actions	Individual prescriptive actions Investigative actions Consultation Staff meetings Action meetings (focus of this session)
● What are Action Meetings?	Framework for collective maintenance problem-solving Opportunity to transform informa- tion on maintenance problems into actions to improve performance and readiness
● Benefits of Action Meetings	<ul style="list-style-type: none"> - Improved maintenance performance via: <ul style="list-style-type: none"> Use of time (more accomplished in less time) Exchange of information (increase knowledge) Communication (reduce barriers) Teamwork/communication Training - Feedback on performance <ul style="list-style-type: none"> How well they are doing, need specific information, without feedback, one can't learn - Performance measurement/quality control <ul style="list-style-type: none"> No check, chance of no results - Recognition/appreciation/motivation <ul style="list-style-type: none"> Informal, immediate has more impact than formal delayed frustration from lack of recognition How often have you heard "I know a better way"? Feeling that directives are not effective

TOPIC	NOTES
	Perceptions that higher authority doesn't understand situation
● Action Meetings Provide—	Involvement in problem resolution Identification with group Feeling of participation (belonging) Emphasis of importance of maintenance to overall readiness Increase in job satisfaction
● Who Shall Participate	Section leaders and mechanics, at all action meetings, occasionally TAMMS, PLL clerks, DSU staff.
● Relationship Action Meetings to MPS(0)	MMIS-86 OJT/OJE Certification - Action meetings only part of total system Action meetings won't work miracles by themselves, i.e., won't change maintenance mission, won't provide more resources, supervisor still responsible
● Supervisor/Section Leaders' Role	- You will: Lead meetings Identify problems and objectives Open two-way communication Obtain mechanics' commitment to maintenance objective Involve them in problem-solving, i.e, form alliance with subordinates and recognize need for their support You still have control and final authority You define goals Ensure everyone participates Don't criticize participants during meeting Remind participants have to work within the system
● General Preparation	Commanders briefed Supervisors trained via special training, handbook and assistance from MPS(0) implementation team Participants will receive documentation

SECTION 2: HOLDING THE MEETING

TOPIC	NOTES
● Preparing for Action Meetings	Review progress on prior actions Review MMIS reports (use examples) to identify problems and/or identify improvements
● Review Other Maintenance Performance Information	Identify other sources of information Identify uses of information in Action Meetings
● Establish Your Objectives for Improvement	Identify most critical problems Determine your goal for improvement of each problem
● Prepare Action Meeting Agenda	Cover feedback Recognition Problems and objectives
● Schedule Meeting	Location Time Notification
● Assemble Materials for Meeting	
● Review Your Conduct of Last Meeting	Problems in last meeting Ways to improve next meeting
● Start and Conduct the Meeting	
● Provide Feedback and Recognition	What's going on (big" picture") Progress/results on prior actions Recognition of special achievements/efforts

TOPIC

NOTES

- **Present Problem and Objective**

(Note—feedback enhances individual knowledge of role in organization, positive recognition reinforces what is being done correctly and recognition is performance incentive
Be specific rather than general
Be timely
Keep it simple
Don't say anything you don't mean—be sincere and honest
Keep recognition positive in group situation—save criticism for later in private
- **Identify Causes of Problem**

Problem is one identified during preparation
Objective is specific goal linked to performance improvement
- **Identify Causes of Problem**

State causes you've identified
Get mechanics to identify other possible causes
Focus discussion on causes suggested by group
- **Identify and Select Possible Actions**

Get mechanics' suggestions
Decide if feasible
Will they solve problem?
- **Determine Methods and Resources Needed**

How will it be done?
What resources are needed?,
i.e., men, time, funds
- **Record Key Points and Summarize**

Actions to be taken
When they will be done?
How they will be done?
Who will do each one?
Resources provided

TOPIC

- Follow Up the Meeting

NOTES

Review conduct of meeting--
immediately after meeting
finishes

Monitor progress on completing
actions (over a period)

Identify changes in performance
data (over a period)

Use results to prepare for next
meeting

SECTION 3: CONTROLLING THE MEETING

TOPIC	NOTES
<ul style="list-style-type: none">● Adhere to Personal Code of Conduct	Keep the meeting simple and basic Stick to the subject--don't wander Be patient and low-key Think before you speak Don't get into arguments Don't make negative comments regarding the suggestions of others Don't use your rank, authority to force conclusions Accent the positive (what can be done) not the negative (things you can't change)
<ul style="list-style-type: none">● Handling Meeting Management Problems	Person who talks too much Person who doesn't participate Arguments/conflicts Personal attacks Quick judgments Leaning on someone

SECTION 4: SUPERVISOR EXERCISE FOR PLANNING ACTION MEETINGS

TOPIC	NOTES
<ul style="list-style-type: none"> ● Objective ● Go Through Steps Needed for Action Meeting Preparation 	<p>Provide section leaders with practice in planning an action meeting</p> <p>Review progress on prior actions (simulate for exercise)</p> <p>Review MMIS-86 reports for unit-- use current reports to identify performance problems</p> <p>Review other maintenance performance information--get section leaders to identify additional problems based on current work situation</p> <p>Establish objectives for improvement-- get section leaders to identify reasonable improvement objectives</p> <p>Prepare agenda--guide section leaders through preparation</p> <p>Schedule meeting--have section leaders identify meeting location and time, then make necessary arrangements</p> <p>Notify participants--Can be done at participant orientation</p> <p>Assemble materials for meeting--Have section leaders identify necessary materials and assemble them</p> <p>Review conduct of last meeting-- (simulate)</p>
<ul style="list-style-type: none"> ● Lead Discussion 	<p>Review questions/answers related to conduct of action meetings</p>
<ul style="list-style-type: none"> ● Summarize Context for Participants 	<p>Giving mechanics the opportunity to participate in job-related decisions is an effective way to improve their job performance</p>

TOPIC**NOTES**

To participate in job-related decisions, mechanics must be provided information on background and constraints

Action Meetings are a formal way of providing knowledge of performance results and also providing opportunities for mechanics to participate in developing new job methods and procedures

Action Meetings alone do not necessarily result in high levels of participation or improvements in job performance

Your role is critical to successful implementation of Action Meetings

Action Meetings can provide improved performance by your mechanics and a more successful, trouble-free maintenance operation

**EXHIBIT C:
NOTES FOR BRIEFING MECHANIC
PARTICIPANTS IN ACTION MEETINGS**

TOPIC	NOTES
<ul style="list-style-type: none"> ● Provide Background Summary (Refer to Commanders/Supervisors section for details provided in introduction.) 	<ul style="list-style-type: none"> - Explain what an action meeting is - Outline the benefits to maintenance effectiveness of having mechanics' input - Explain feedback and recognition (previously missing) - Emphasize opportunity for mechanics to offer maintenance solutions
<ul style="list-style-type: none"> ● Provide Rules for Participation 	<ul style="list-style-type: none"> - Everyone must participate to get their ideas heard and learn ideas of others (nothing in—nothing out) - No criticism of others and their input—no personal attacks and no putdown of other ideas
<ul style="list-style-type: none"> ● Provide Opportunities for Questions 	<ul style="list-style-type: none"> - Review topics and background to ensure mechanics understand concept and procedures